

## Laokhowa and other Rhino Areas in Assam

BY

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## I. LAOKHOWA

The 26-square-mile Laokhowa Reserved Forest was constituted as such about 1929, but has been recognized as a 'multiple-use' area since 1958 and was proposed as a Wild Life Reserve in 1965. The reserve includes one forest village of 51 households or approximately 535 people, seven *taungya*<sup>1</sup> villages with a total of 166 households or between 800 and 900 people and 140 acres of plantation forests. Each forest village household is allowed to cultivate two and one-third acres inside the reserve and each *taungya* household is allowed two acres. They are also permitted free and unrestricted grazing inside the sanctuary and it is estimated that each household has at least three head of livestock. In addition, the Ruphiah Co-operative (a fishery and farming co-op.) has leased 400 acres for agricultural cultivation since 1958 for Rs. 1.75 per acre per year, and the reserve's *bils* are exploited for their fishery resources on a lease system. Permits are also given to villagers living in the vicinity of the reserve for the grazing of domestic livestock. In short, the Laokhowa Reserve has a human population of approximately 1400, contains at least 1000 acres of cultivation, and provides grazing for approximately 5000 head of livestock. This is apart from the fact that its forest and fishery resources are also exploited to the fullest extent.

<sup>1</sup> *Taungya* is a forest village in which the villagers cultivate plantation forests in return for rights of cultivation etc. in the forest area.

Approximately 70% of the reserve consists of open areas, including grasslands, cultivation, *bils*, etc., and the remaining 30% consists of forests, primarily of plantation or pure natural stands of *simul* (*Bombax ceiba*) or mixed open forests of *simul* and *koroi* (*Albizzia procera*). The relatively soft and light wood from these two species is used primarily for matches and match boxes.

We travelled from Kaziranga to Nowgong on March 12. I met Mr. P. C. Gogoi (Nowgong Divisional Forest Officer) that evening and discussed the status of the rhino in the Nowgong Forest Division. The following day we visited Laokhowa, which is 13 miles from the town of Nowgong. Elephants were provided by the Forest Department and we spent the morning inside the reserve searching for rhino. Members of the staff estimated that there were between 30 and 40 rhino in the reserve and it was claimed that 37 were counted in 1965. They further stated that rhino were restricted primarily to the eastern and central parts of the reserve. However, the largest *bil* (Khalihamari) which has the most suitable habitat (cover) is located in the north-western corner. The two rhino which we observed during our visit were located here. Other wild animals inside the reserve include : wild buffalo (we saw six), a few wild pig, hog deer, and swamp deer. A wild life enumeration, utilizing methods comparable to those used in Kaziranga, was conducted by the Forest Department on March 28. The reserve was divided into six compartments. Census parties consisting of an enumerator, guide, mahout, and elephant tallied the animals observed in each compartment. Most of the rhino were seen in the north-western part of the reserve or along the Mora Suti, a tributary of the Brahmaputra River. The results of the Forest Department's enumeration are presented in the Table.

TABLE  
RESULTS OF THE LAOKHOWA RESERVE WILD LIFE ENUMERATION CONDUCTED  
BY THE FOREST DEPARTMENT ON 28 MARCH 1966

Kind of Animal	'Non-sexed'	Number of Animals		Young	Total
		Adult Male	Adult Female		
Rhino ..	1	25	12	3	41
Wild Buffalo ..	—	10	29	11	50
Swamp Deer ..	—	4	—	—	4
Hog Deer ..	—	6	—	—	6
Wild Pig ..	—	5	—	—	5

Numerous people were observed to be moving freely about the reserve during our visit. Overgrazing by domestic livestock was also evident in all parts visited. Besides the apparent lack of sufficient forage to main-

tain animals the size of rhino, cover also appeared to be almost non-existent. During the afternoon we jeeped to the north-eastern part of the reserve and questioned a number of villagers there as to the presence of rhino. They claimed that there were four, including a large calf, in that area. Based upon my limited observations and the degree of habitat abuse presently being practised in the Laokhowa Reserve, I doubt that its rhino population will be able to increase or even maintain its present status.

Three cases of rhino dying as a result of injuries sustained in fighting have been reported from Laokhowa since 1964. An adult female died in July 1964, a male in February 1965, and another male in November 1965. The weights of the recovered horns were 0·57, 0·14, and 2·20 kg. respectively. Whether or not this high incidence of mortality due to fighting can be attributed to a lack of forage and/or the presence of so many disturbing elements is not known.

## II. KUKURATA

*En route* to Nowgong, Mr. Gohain and I also visited the Kukurata Reserved Forest, located along the Brahmaputra River west of Kaziranga. This small reserve contains about 8000 acres, most of which consists of plantation teak (*Tectona grandis*). We were met by Mr. R. N. Saikia (Jaklabhanda Beat Officer), who informed us that the rhino in this area inhabited an approximately one-square-mile grassland marsh called Mohkhuti Bil. This *bil* is located along the north-western boundary of the reserve 11 miles downstream from Kaziranga. Although this area is outside the reserve and we were informed that the rhino rarely enter the reserve proper, Mr. Saikia stated that the nearby villagers come to the Forest Department for help whenever the rhino raid their crops. Also he counted seven different rhino, including two calves, while attempting to frighten them away from the paddy fields in January. He accompanied us to Mohkhuti Bil, where we met several members of the Embankment and Drainage Department. This department has constructed a *bund* along the southern edge of the *bil* for flood control and a small staff remains in the area. One man informed us that he saw a female rhino with a small calf cross the *bund* the previous day (March 11) and the watchman claimed that he saw four rhino (apparently all adults) on March 10. Some of the nearby villagers claimed that there were more than seven rhino in the area, but they had no idea what the actual number might be. However, it appears almost certain that there are at least seven in this vicinity.

### III. RAJA MAYANG

It was proposed by the Forest Department in 1965 that the 4464-acre Raja Mayang Forest area be constituted as the Pobitora Reserved Forest. This reserve is also located in the Nowgong Forest Division and the Forest Department claims that it contains 12 rhino. Perhaps to be on the conservative side, this number should be reduced by half.

A case of poaching was detected by the Forest Department in Raja Mayang in 1964. The case was investigated by the police and the 1.75 kg. horn of an adult female was recovered and turned over to the Forest Department. An adult male also died in February 1966 from injuries sustained in fighting. The horn from this rhino weighed 1.265 kilograms.

### IV. ORANG

I was informed by Mr. Gogoi that the 24-square-mile Orang Reserved Forest in the Darrang Forest Division has a rhino population of approximately 25. However, many of these rhino do not permanently reside there, but frequently enter or leave the reserve. It was further stated that this reserve and the surrounding areas are probably inhabited by a total of approximately 50 rhino, including the near-by *chapories* of the Brahmaputra River, and that they are increasing in numbers every year. Mr. Gee estimated in 1964 that there were only 12 rhino in Orang. Therefore, to be on the conservative side, I will accept his figure, but will add a few to his estimate of total rhino found outside of the sanctuaries or reserved forests in Assam.

### V. ELSEWHERE

Besides the rhino reported in the areas surrounding the Orang Reserved Forest, the Doboka Reserved Forest also contains two adult rhino, supposedly an adult male and a female. This area, located 32 miles from the town of Nowgong, also reported the death of an adult male in April 1964 as a result of injuries sustained in fighting. The collected horn weighed 1.875 kilograms.

Returning to Kaziranga from Nowgong, we also visited Bihdubi Chapori, which is located three miles west of Silghat. Mr. Gohain had observed a female with a calf in the dense grasslands of this sandy flood plain in mid-December of 1965. When we inquired about rhino at Ferryghat, we were informed that a solitary rhino (apparently a male) frequented the area, but had not been seen since the first of March. Six rhino were also reported in 1959 to inhabit an island (Sal Chapori) in the Brahmaputra River near Kaziranga.

The authenticity or accuracy of scattered reports of rhino outside of established wild life sanctuaries or reserved forests is very difficult to determine. The chances of these animals successfully breeding or attaining any appreciable numbers in these areas also appear to be very slight. In my opinion, strictly protected sanctuaries or reserved forests offer the only means of preserving this species from annihilation. Although I feel that these scattered animals add little to the reproductive potential for the species, I estimate that there are probably at least 40 rhino outside of the major reserved forests and the Kaziranga and Manas wild life sanctuaries in Assam.